

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) In a computing system, a method for providing runtime automatic spelling analysis and correction in connection with a service utilizing a query input mechanism, comprising:

receiving from a client computing device original query entry data comprising at least one word;

analyzing the spelling of the at least one word and determining whether at least one word has a mistake; and

forming auto-corrected query entry data wherein said forming includes, for each word having a mistake, replacing the word having the mistake with an alternative word, if the alternative word satisfies at least one threshold confidence calculation;

~~performing the service utilizing the auto-corrected query entry data instead of the original query entry data;~~

~~sending the results of performing the service with the auto-corrected query entry data to the client computing device for display; and~~

~~transmitting link data to the client computing device for displaying a link on the client computing device, which link, if input by the user, re-performs the service with the original query entry data instead of the auto-corrected query entry data.~~

2. (original) A method according to claim 1, wherein before said receiving, said query entry data is input to the client computing device in the query input mechanism of the service.

3. (canceled)

4. (currently amended) A method according to claim 53 ~~4~~, wherein the service is a search engine, and said performing includes returning search results based upon said auto-corrected query entry data.
5. (canceled)
6. (canceled)
7. (currently amended) A method according to claim 53 ~~4~~, further including updating at least one confidence score associated with at least one replaced word of the auto-corrected query entry data to reflect that the user is dissatisfied with the auto-corrected query entry data.
8. (currently amended) A method according to claim 53 ~~4~~, further including receiving again from the client computing device the original query entry data; and
performing the service utilizing the original query entry data instead of the auto-corrected query entry data.
9. (original) A method according to claim 8, further including updating at least one confidence score associated with at least one replaced word of the auto-corrected query entry data to reflect that the user is dissatisfied with the auto-corrected query entry data.
10. (original) A method according to claim 1, wherein said determining whether at least one word has a mistake includes determining whether the at least one word is in a unified dictionary.
11. (original) A method according to claim 10, further including dynamically updating said unified dictionary, wherein said updating includes aggregating a plurality of data stores, with said plurality of data stores including at least one dynamically updated data store.

12. (original) A method according to claim 10, wherein said unified dictionary is formed from a plurality data sources including a Web-specific lexicon. /
13. (original) A method according to claim 1, wherein said replacing includes:
for each word having a mistake, discovering at least one alternative word that is a nearest neighbor to the word having the mistake;
calculating a confidence score for each of said at least one alternative word, wherein the confidence score is a relative measure of a likelihood that the alternative word is the word without the mistake; and
determining whether any of the at least one alternative words has a confidence score that exceeds a first threshold.
14. (original) A method according to claim 13, wherein said replacing further includes:
if any of the at least one alternative words has a confidence score that exceeds the first threshold, determining for the two alternative words of the at least one alternative words having the highest confidence scores whether the difference between the two confidence scores is greater than a second threshold; and
if the difference is greater than the second threshold, replacing the word having the mistake with the alternative word having the highest confidence score.
15. (original) A method according to claim 13, wherein said replacing further includes:
if there is only one alternative word that is a nearest neighbor to the word having the mistake, and if the confidence score for the one alternative word exceeds the first threshold, replacing the word having the mistake with the alternative word.
16. (original) A computer readable medium having stored thereon a plurality of computer-executable instructions for performing the method of claim 1.

17. (original) A modulated data signal carrying computer executable instructions for performing the method of claim 1.
18. (original) A computing device comprising means for performing the method of claim 1.
19. (currently amended) In a computing system, a method for providing runtime automatic spelling analysis and correction in connection with a service accessed from a client computing device utilizing a query input mechanism, comprising:
- inputting to the query input mechanism of the client computing device original query entry data comprising at least one word;
 - transmitting said original query entry data to a server computing device; and
 - receiving results from the performance of said service based on auto-corrected query entry data, wherein the forming of the auto-corrected query entry data in connection with said performance includes:
 - analyzing the spelling of the at least one word of the original query entry data and determining whether at least one word has a mistake; and
 - for each word having a mistake, replacing the word having the mistake with an alternative word, if the alternative word satisfies at least one threshold confidence calculation; and
 - ~~displaying on the client computing device a link, which link, if input by the user, re-performs the service with the original query entry data instead of the auto-corrected query entry data.~~
20. (original) A method according to claim 19, wherein the service is a search engine, and said results are search results based upon said auto-corrected query entry data.
21. (original) A method according to claim 19, further including displaying the results of performing the service with the auto-corrected query entry data on the client computing device.

22. (canceled)

23. (currently amended) A method according to claim ~~54~~ 19, further including updating at least one confidence score associated with at least one replaced word of the auto-corrected query entry data to reflect that the user is dissatisfied with the auto-corrected query entry data.

24. (original) A method according to claim 19, further including inputting again to the query input mechanism of the client computing device the original query entry data; and
performing the service utilizing the original query entry data instead of the auto-corrected query entry data.

25. (original) A method according to claim 24, further including updating at least one confidence score associated with at least one replaced word of the auto-corrected query entry data to reflect that the user is dissatisfied with the auto-corrected query entry data.

26. (original) A method according to claim 19, wherein said determining whether at least one word has a mistake includes determining whether the at least one word is in a unified dictionary.

27. (original) A method according to claim 26, further including dynamically updating said unified dictionary, wherein said updating includes aggregating a plurality of data stores, with said plurality of data stores including at least one dynamically updated data store.

28. (original) A method according to claim 26, wherein said unified dictionary is formed from a plurality data sources including a Web-specific lexicon.

29. (original) A method according to claim 19, wherein said replacing includes:
for each word having a mistake, discovering at least one alternative word that is a nearest neighbor to the word having the mistake;
calculating a confidence score for each of said at least one alternative word, wherein the confidence score is a relative measure of a likelihood that the alternative word is the word without the mistake; and
determining whether any of the at least one alternative words has a confidence score that exceeds a first threshold.
30. (original) A method according to claim 29, wherein said replacing further includes:
if any of the at least one alternative words has a confidence score that exceeds the first threshold, determining for the two alternative words of the at least one alternative words having the highest confidence scores whether the difference between the two confidence scores is greater than a second threshold; and
if the difference is greater than the second threshold, replacing the word having the mistake with the alternative word having the highest confidence score.
31. (original) A method according to claim 29, wherein said replacing further includes:
if there is only one alternative word that is a nearest neighbor to the word having the mistake, and if the confidence score for the one alternative word exceeds the first threshold, replacing the word having the mistake with the alternative word.
32. (original) A computer readable medium having stored thereon a plurality of computer-executable instructions for performing the method of claim 19.
33. (original) A modulated data signal carrying computer executable instructions for performing the method of claim 19.

34. (original) A computing device comprising means for performing the method of claim 19.
35. (original) In a computing system, a method for displaying results of a runtime service based upon an auto-corrected query data set, wherein the auto-corrected query data is different than an entered query data set input to a query input mechanism, comprising:
first displaying the auto-corrected query data set in the query input mechanism;
second displaying the search results based upon the auto-corrected query data set; and
near the query input mechanism, third displaying a link which enables the re-performance of the service with the entered query data set.
36. (original) A method according to claim 35, further including:
in response to an inputting of the link, fourth displaying the entered query data set in the query input mechanism; and
fifth displaying the search results based upon the entered query data set.
37. (original) A method according to claim 35, further including:
in response to re-entering of the entered query data set to the query input mechanism,
fourth displaying the entered query data set in the query input mechanism; and
fifth displaying the search results based upon the entered query data set.
38. (original) A computer readable medium having stored thereon a plurality of computer-executable instructions for performing the method of claim 35.
39. (original) A computing device comprising means for performing the method of claim 35.
40. (currently amended) A computing device for providing runtime automatic spelling analysis and correction in connection with a network service utilizing a query input mechanism, comprising:

means for receiving from a client computing device original query entry data comprising at least one word;

means for analyzing the spelling of the at least one word and means for determining whether at least one word has a mistake;

means for generating auto-corrected query entry data if according to at least one threshold confidence calculation, the auto-corrected query entry data corrects at least one mistake in the original query entry data; and

means for performing said network service automatically replacing said original query entry data with said auto-corrected query entry data; ~~and~~

~~means for transmitting the results of performing the service with the auto-corrected query entry data to the client computing device for display; and~~

~~means for transmitting link data to the client computing device for displaying a link on the client computing device, which link, if input by the user, re-performs the service with the original query entry data instead of the auto-corrected query entry data.~~

41. (original) A computing device according to claim 40, wherein the network service is a search engine, and said means for performing includes means for returning search results based upon said auto-corrected query entry data.

42. (canceled)

43. (canceled)

44. (currently amended) A computing device according to claim 55 40, further including means for updating at least one confidence score associated with at least one replaced word of the auto-corrected query entry data to reflect that the user is dissatisfied with the auto-corrected query entry data.

45. (original) A computing device according to claim 40, wherein said means for receiving further includes means for receiving from the client computing device the original query entry data again; and

in response to receiving the original query entry data again, said means for performing performs the service utilizing the original query entry data instead of the auto-corrected query entry data.

46. (original) A computing device according to claim 45, further including means for updating at least one confidence score associated with at least one replaced word of the auto-corrected query entry data to reflect that the user is dissatisfied with the auto-corrected query entry data.

47. (original) A computing device according to claim 40, wherein said means for determining whether at least one word has a mistake includes means for determining whether the at least one word is in a unified dictionary.

48. (original) A computing device according to claim 47, wherein said unified dictionary is dynamically updated, and is an aggregate data store aggregated from a plurality of data stores, with said plurality of data stores including at least one dynamically updated data store.

49. (previously presented) A computing device according to claim 47, wherein said unified dictionary is aggregated from a plurality data sources including a Web-specific lexicon.

50. (original) A computing device according to claim 40, wherein said means for generating auto-corrected query entry data, for each word having a mistake, discovers at least one alternative word that is a nearest neighbor to the word having the mistake, calculates a confidence score for each of said at least one alternative word, wherein the confidence score is a relative measure of a likelihood that the alternative word is the word without the mistake and

determines whether any of the at least one alternative words has a confidence score that exceeds a first threshold.

51. (original) A computing device according to claim 50, wherein if any of the at least one alternative words has a confidence score that exceeds the first threshold, said means for generating determines for the two alternative words of the at least one alternative words having the highest confidence scores whether the difference between the two confidence scores is greater than a second threshold and if the difference is greater than the second threshold, said means for generating replaces the word having the mistake with the alternative word having the highest confidence score.

52. (original) A computing device according to claim 50, wherein if there is only one alternative word that is a nearest neighbor to the word having the mistake and if the confidence score for the one alternative word exceeds the first threshold, said means for generating replaces the word having the mistake with the alternative word.

53. (new) A method according to claim 1, further comprising:
performing the service utilizing the auto-corrected query entry data instead of the original query entry data;
sending the results of performing the service with the auto-corrected query entry data to the client computing device for display; and
transmitting link data to the client computing device for displaying a link on the client computing device, which link, if input by the user, re-performs the service with the original query entry data instead of the auto-corrected query entry data

54. (new) A method according to claim 19, further comprising displaying on the client computing device a link, which link, if input by the user, re-performs the service with the original query entry data instead of the auto-corrected query entry data.

DOCKET NO.: MSFT-0739/158459.01
Application No.: 10/004,490
Office Action Dated: September 21, 2004

PATENT
REPLY FILED UNDER EXPEDITED
PROCEDURE PURSUANT TO
37 CFR § 1.116

55. (new) A computing device according to claim 40, further comprising:
- means for transmitting the results of performing the service with the auto-corrected query entry data to the client computing device for display; and
 - means for transmitting link data to the client computing device for displaying a link on the client computing device, which link, if input by the user, re-performs the service with the original query entry data instead of the auto-corrected query entry data.